Orthopaedics & Traumatology: Surgery & Research (2012) **98**, 251—252

Available online at
SciVerse ScienceDirect
www.sciencedirect.com
Elsevier Masson France
EM|consulte
www.em-consulte.com/en

EDITORIAL

Why publish a survey of orthopaedic scientific production from China?

The editorial board of *Orthopaedics and Traumatology Surgery and Research* has the opportunity to publish a manuscript comparing the evolution of orthopaedic publications from China, Taiwan, and Hong Kong over the last 10 years [1]. Many of our readers may wonder why this paper is being published, considering its general scope and low likelihood of inducing substantial changes in everyday orthopaedic practice.

Several considerations led the editorial board to accept this survey for publication. Firstly, developing a clear picture of worldwide changes in scientific data over time is crucial. One recent and remarkable change is the explosion in scientific production from East Asia. This phenomenon started in the 1970s with robust scientific production from Japan, Hong Kong, and South Korea. More recently, a strong increase in scientific publications from emerging countries dramatically reduced the proportion of published scientific data from Europe and North America [2]. More specifically, research activities in China and India are sufficiently strong to result in publications in major international orthopaedic journals and to support the creation of new journals whose impact factors can be expected to increase rapidly in the near future. For instance, the *Indian Journal of Orthopaedics* has been indexed in PubMed since 2007 (impact factor, 0.285), the *Chinese Journal of Reparative and Reconstructive Surgery* (*Zhongguo Xiu Fu Chong Jian Wai Ke Za Zhi*) since 1997 (impact factor, 1.17), and the *China Journal of Orthopaedics and Traumatology* (*Zhongguo gu shang*) since 2008 (impact factorn 0.7). From 1997 to 2008, the *Chinese Journal of Reparative and Reconstructive Surgery* published 2129 papers, compared to only 1286 published in *Orthopaedics and Traumatology Surgery and Research* (impact factor, 0.26 in 2008). Secondly, a corollary of the rapid increase in scientific data from emerging countries in Asia and elsewhere is a need to understand the mechanisms underlying orthopaedic research and its publication in these parts of the world. The article in this issue of *Orthopaedics and Traumatology Surgery and Research* [1] underlines the increasing scientific quality of publications from China, which is further supported by the parallel increase in impact factors, which now have a mean value of 2. This value close to that seen in countries with a longer history of orthopaedic publications suggests that China has mastered the process for producing and publishing articles of high scientific quality in major orthopaedic journals. In addition, demographic considerations suggest that China and emerging countries in Asia will become major competitors in terms of scientific production, particularly for West Europe and North America. Thirdly, a 2010 bibliometric study found that the 100 most often cited papers originated chiefly from the US and UK [3]. However, the sheer numbers of papers from China may shift the balance away from these two countries in the near future. As reported in the survey published in this issue of *Orthopaedics and Traumatology Surgery and Research* [1], the recent history of orthopaedics data generated in China, Taiwan, and Hong Kong may help to forecast the evolution of scientific production over the next 10 years. China was not listed in a 2006 report comparing countries in terms of the number of publications in major orthopaedic journals from 2000 to 2004 [4]. In contrast, in a 2007 study of the number of papers published in high-impact-factor orthopaedic journals, France ranked ninth and China sixth, while the US and UK ranked first and second, respectively [5]. Undoubtedly, if the evolution described in the current paper [1] continues, a new balance will emerge in the next 10 years regarding scientific production in orthopaedics.

References

[1] Cheng T. Increased Chinese orthopaedic research output during 2000—2009: a survey of scientific publications from China. Orthop Traumatol Surg Res 2012;98: in press, doi:10.1016/j.otsr.2011.12.002.
[2] Franzoni C, Scellato G, Stephan P. Science policy. Changing incentives to publish. Science 2011;333:702—3.

1877-0568/$ - see front matter
doi:10.1016/j.otsr.2012.02.001

[3] Kelly JC, Glynn RW, O'Briain DE, Felle P, McCabe JP. The 100 classic papers of orthopaedic surgery: a bibliometric analysis. J Bone Joint Surg (Br) 2010;92:1338—43.
[4] Bosker BH, Verheyen CC. The international rank order of publications in major clinical orthopaedic journals from 2000 to 2004. J Bone Joint Surg (Br) 2006;88:156—8.
[5] Ilharreborde B, Delblond W, Ould-Slimane M, Penneçot GF, Guigui P, Mazda K. Place des orthopédistes français dans la littérature mondiale. Intérêt des séances de bibliographie ? À propos d'un sondage réalisé auprès de 39 centres hospitalo-universitaires. Rev Chir Orthop Traumatol 2010;96:236—41.

H. Migaud
86, rue Boissonade, 75014 Paris, France
E-mail address: h-migaud@chru-lille.fr